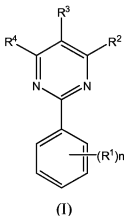


### Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

#### **Listing of Claims:**

1. (Currently amended) A pharmaceutical composition comprising a compound of formula (I)



or a pharmaceutical acceptable salt thereof, wherein

n is 0 to 5;

R<sup>1</sup> is each independently selected from the group consisting of halo, cyanato, thiocyanato, selenocyanato, trifluoromethoxy, azido, cyano, nitro, hydroxyl, formyl, mercapto, hydroxycarbonyl, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, alkoxy, aminoalkyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, and optionally substituted heterocyclyl;

R<sup>2</sup> is selected from the group consisting of optionally substituted cycloalkyl, optionally substituted aralkyl, -OR<sup>6</sup>, -S(O)<sub>n</sub>R<sup>6</sup>, -N(R<sup>9</sup>)S(O)<sub>n</sub>R<sup>10</sup>, -C(O)R<sup>6</sup>, -C(O)OR<sup>6</sup>, and -C(O)N(R<sup>7</sup>)R<sup>8</sup>;

R<sup>3</sup> is independently selected from the group consisting of hydrogen, halo, cyanato, thiocyanato, selenocyanato, trifluoromethoxy, azido, nitro, hydroxyl, formyl, mercapto, alkyl, optionally substituted alkenyl, optionally substituted alkynyl, alkoxy, aminoalkyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, and optionally substituted heterocyclyl; or

$R^4$  selected from the group consisting of ~~hydrogen, halo, cyano, thiocyanato,~~  
selenocyanato, trifluoromethoxy, azido, cyano, nitro, hydroxyl, formyl, mercapto,  
~~optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl,~~  
optionally substituted cycloalkyl, optionally substituted cycloalkylalkyl, optionally  
substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl,  
optionally substituted heteroaryl, optionally substituted heteroaralkyl, optionally  
substituted heterocyclalkyl,  $-R^{12}-OR^{13}$ ,  $-R^{12}-N(R^{14})R^{15}$ ,  $-R^{12}-C(O)R^{13}$ ,  $-R^{12}-C(O)OR^{15}$ ,  
 $-R^{12}-N(R^{14})C(O)R^{15}$ ,  $-R^{12}-N(R^{14})C(O)OR^{15}$ ,  $-R^{12}-S(O)_2R^{15}$  and  $-R^{12}-S(O)_2N(R^{14})R^{15}$ ;

$R^6$  represents ~~optionally~~ substituted alkyl, optionally substituted aryl, optionally  
substituted aralkyl or optionally substituted heterocyclyl;

$R^7$  represents H or optionally substituted alkyl;

$R^8$  represents optionally substituted alkyl, optionally substituted aryl, optionally  
substituted aralkyl or optionally substituted heterocyclyl;

$R^9$  represents H or optionally substituted alkyl;

$R^{10}$  represents optionally substituted alkyl, optionally substituted aryl, optionally  
substituted aralkyl or optionally substituted heterocyclyl;

$R^{12}$  represents a  $C_1$ - $C_6$  alkylene,  ~~$C_4$ - $C_6$~~   $C_2$ - $C_6$  alkenylene,  ~~$C_4$ - $C_6$~~   $C_2$ - $C_6$  alkynylene  
or  $C_1$ - $C_6$  alkyleneoxy;

$R^{13}$  represents optionally substituted alkyl, optionally substituted aryl, optionally  
substituted aralkyl or optionally substituted heterocyclyl;

$R^{14}$  represents H or optionally substituted alkyl;

$R^{15}$  represents optionally substituted alkyl, optionally substituted aryl, optionally  
substituted aralkyl or optionally substituted heterocyclyl, and where each t is  
independently 0 to 2,

wherein the optional substituents are independently  $Q^1$ , where  $Q^1$  represents alkyl,  
haloalkyl, cycloalkyl, cycloalkylalkyl, heterocyclalkyl, aryl, aralkyl, heteroaryl,  
heteroaralkyl, cyano, halo, hydroxyl, hydroxycarbonyl, cyanato, thiocyanato,  
selenocyanato, trifluoromethoxy, azido,  $-R^{30}-OR^{31}$ ,  $-R^{30}-SR^{16}$ ,  $-R^{30}-N(R^{32})(R^{33})$ ,  $-R^{30}-$   
 $C(J)R^{34}$ ,  $-R^{30}-C(J)OR^{31}$ ,  $-R^{30}-C(J)N(R^{31})N(R^{32})(R^{33})$ ,  $-R^{30}-N(R^{31})C(J)R^{34}$ ,  $-R^{30}-$   
 $N(R^{31})C(J)OR^{31}$ ,  $-R^{30}-N(R^{31})C(J)N(R^{32})(R^{33})$ ,  $-R^{30}-OC(J)R^{34}$ ,  $-R^{30}-OC(J)OR^{31}$ ,  
 $-R^{30}-OC(J)N(R^{32})(R^{33})$ ,  $-Si(R^{35})_3$ ,  $-N(R^{31})S(O)_2R^{36}$  or  $-R^{30}-S(O)_2R^{36}$ ;

where each  $R^{30}$  is independently a direct bond or a straight or branched alkylene chain;

$R^{31}$  and  $R^{34}$  are each independently hydrogen, alkyl, alkenyl, alkynyl, haloalkyl, cycloalkyl, cycloalkylalkyl, heterocyclalkyl, aryl, aralkyl, heteroaryl or heteroaralkyl;

$R^{32}$  and  $R^{33}$  are each independently hydrogen, alkyl, alkenyl, alkynyl, haloalkyl, cycloalkyl, cycloalkylalkyl, heterocycl, aryl, aralkyl, heteroaryl or heteroaralkyl;

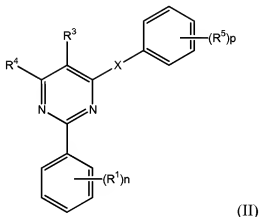
or  $R^{32}$  and  $R^{33}$  together with the nitrogen atom to which they are attached, from a heterocyclalkenyl, or heteroaryl;

$R^{35}$   $R^{36}$  and  $R^{16}$  are each independently alkyl, alkenyl, alkynyl, haloalkyl, cycloalkyl, cycloalkylalkyl, heterocycl, heterocyclalkyl, aryl, aralkyl, heteroaryl or heteroaralkyl;

each J is independently O or S; and each y is independently 0 to 2;

and a pharmaceutically acceptable excipient.

2. (Currently Amended) A pharmaceutical composition comprising the compound of formula (II)



(II)

wherein

n is 0 to 2; p is 0 to 2;

X is O, or S(O), where r is 0 to 2;

$R^1$  is each independently selected from the group consisting of halo, cyano, thiocyanato, selenocyanato, trifluoromethoxy, azido, cyano, nitro, hydroxyl, formyl, mercapto, hydroxycarbonyl, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, alkoxy, aminoalkyl, optionally substituted aryl, optionally

substituted heteroaryl, optionally substituted cycloalkyl, and optionally substituted heterocyclyl;

R<sup>3</sup> is independently selected from the group consisting of hydrogen, halo, cyanato, thiocyanato, selenocyanato, trifluoromethoxy, azido, nitro, hydroxyl, formyl, mercapto, alkyl, optionally substituted alkenyl, optionally substituted alkynyl, alkoxy, aminoalkyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, and optionally substituted heterocyclyl; or

R<sup>4</sup> selected from the group consisting of ~~hydrogen, halo,~~ cyanato, thiocyanato, selenocyanato, trifluoromethoxy, azido, cyano, nitro, hydroxyl, formyl, mercapto, ~~optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl,~~ optionally substituted cycloalkyl, optionally substituted cycloalkylalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, optionally substituted heteroaralkyl, optionally substituted heterocyclylalkyl, -R<sup>12</sup>-OR<sup>13</sup>, -R<sup>12</sup>-N(R<sup>14</sup>)R<sup>15</sup>, -R<sup>12</sup>-C(O)R<sup>13</sup>, -R<sup>12</sup>-C(O)OR<sup>15</sup>, -R<sup>12</sup>-N(R<sup>14</sup>)C(O)R<sup>15</sup>, -R<sup>12</sup>-N(R<sup>14</sup>)C(O)OR<sup>15</sup>, -R<sup>12</sup>-S(O)<sub>2</sub>R<sup>15</sup> and -R<sup>12</sup>-S(O)<sub>2</sub>N(R<sup>14</sup>)R<sup>15</sup>;

each R<sup>5</sup> independently selected from the group consisting of halo, cyanato, thiocyanato, selenocyanato, trifluoromethoxy, azido, cyano, hydroxyl, formyl, mercapto, hydroxycarbonyl, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, optionally substituted cycloalkyl, optionally substituted heterocyclyl, -OR<sup>20</sup>, -S(O)<sub>2</sub>R<sup>20</sup>, -N(R<sup>7</sup>)R<sup>20</sup>, -N(R<sup>9</sup>)S(O)<sub>2</sub>R<sup>20</sup>, -C(O)R<sup>20</sup>, and -C(O)OR<sup>20</sup>;

R<sup>7</sup> and R<sup>9</sup> are each independently H or optionally substituted alkyl;

R<sup>12</sup> represents a C<sub>1</sub>-C<sub>6</sub> alkylene, C<sub>2</sub>-C<sub>6</sub>E<sub>4</sub>-E<sub>6</sub> alkenylene, C<sub>2</sub>-C<sub>6</sub>E<sub>4</sub>-E<sub>6</sub>alkynylene or C<sub>1</sub>-C<sub>6</sub>alkyleneoxy;

R<sup>13</sup> represents optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl or optionally substituted heterocyclyl;

R<sup>14</sup> represents H or optionally substituted alkyl;

R<sup>15</sup> represents optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl or optionally substituted heterocyclyl;

$R^{20}$  represents optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl or optionally substituted heterocyclyl and where each t is independently 0 to 2

wherein the optional substituents are independently  $Q^1$ , where  $Q^1$  represents alkyl, haloalkyl, cycloalkyl, cycloalkylalkyl, heterocyclyl, heterocyclylalkyl, aryl, aralkyl, heteroaryl, heteroaralkyl, cyano, halo, hydroxyl, hydroxycarbonyl, cyanato, thiocyanato, selenocyanato, trifluoromethoxy, azido,  $-R^{30}-OR^{31}$ ,  $-R^{30}-SR^{16}$ ,  $-R^{30}-N(R^{32})(R^{33})$ ,  $-R^{30}-C(J)R^{34}$ ,  $-R^{30}-C(J)OR^{31}$ ,  $-R^{30}-C(J)N(R^{31})N(R^{32})(R^{33})$ ,  $-R^{30}-N(R^{31})C(J)R^{34}$ ,  $-R^{30}-N(R^{31})C(J)OR^{31}$ ,  $-R^{30}-N(R^{31})C(J)N(R^{32})(R^{33})$ ,  $-R^{30}-OC(J)R^{34}$ ,  $-R^{30}-OC(J)OR^{31}$ ,  $-R^{30}-OC(J)N(R^{32})(R^{33})$ ,  $-Si(R^{35})_3$ ,  $-N(R^{31})S(O)_2R^{36}$  or  $-R^{30}-S(O)_2R^{36}$ ,

where each  $R^{30}$  is independently a direct bond or a straight or branched alkylene chain;

$R^{31}$  and  $R^{34}$  are each independently hydrogen, alkyl, alkenyl, alkynyl, haloalkyl, cycloalkyl, cycloalkylalkyl, heterocyclylalkyl, aryl, aralkyl, heteroaryl or heteroaralkyl;

$R^{32}$  and  $R^{33}$  are each independently hydrogen, alkyl, alkenyl, alkynyl, haloalkyl, cycloalkyl, cycloalkylalkyl, heterocyclyl, aryl, aralkyl, heteroaryl or heteroaralkyl;

or  $R^{32}$  and  $R^{33}$  together with the nitrogen atom to which they are attached, form a heterocyclylalkenyl, or heteroaryl;

$R^{35}$ ,  $R^{36}$  and  $R^{16}$  are each independently alkyl, alkenyl, alkynyl, haloalkyl, cycloalkyl, cycloalkylalkyl, heterocyclyl, heterocyclylalkyl, aryl, aralkyl, heteroaryl or heteroaralkyl;

each J is independently O or S; and each y is independently 0 to 2;

and a pharmaceutically acceptable excipient.

3. (Currently amended) The pharmaceutical composition of claim 2 wherein

n is 0; p is 0 to 2; X is O, or  $S(O)_r$  where r is 0 to 2;

$R^3$  is independently selected from the group consisting of hydrogen, halo, cyanato, thiocyanato, selenocyanato, trifluoromethoxy, azido, nitro, hydroxyl, formyl, mercapto, alkyl, optionally substituted alkenyl, optionally substituted alkynyl, alkoxy, aminoalkyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, and optionally substituted heterocyclyl;

$R^4$  selected from the group consisting of hydrogen, halo, cyano, thiocyanato, selenocyanato, trifluoromethoxy, azido, cyano, nitro, hydroxyl, formyl, mercapto, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted cycloalkylalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, optionally substituted heteroaralkyl, optionally substituted heterocyclylalkyl,  $-R^{12}-OR^{13}$ ,  $-R^{12}-N(R^{14})R^{15}$ ,  $-R^{12}-C(O)R^{13}$ ,  $-R^{12}-C(O)OR^{15}$ ,  $-R^{12}-N(R^{14})C(O)R^{15}$ ,  $-R^{12}-N(R^{14})C(O)OR^{15}$ ,  $-R^{12}-S(O)R^{15}$  and  $-R^{12}-S(O)N(R^{14})R^{15}$ ;

each  $R^5$  independently selected from the group consisting of halo, cyano, thiocyanato, selenocyanato, trifluoromethoxy, azido, cyano, nitro, hydroxyl, formyl, mercapto, hydroxycarbonyl, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, optionally substituted cycloalkyl, optionally substituted heterocyclyl,  $-OR^{20}$ ,  $-S(O)R^{20}$ ,  $-N(R^7)R^{20}$ ,  $-N(R^9)S(O)R^{20}$ ,  $-C(O)R^{20}$ , and  $-C(O)OR^{20}$ ;

$R^7$  and  $R^9$  are each independently H or optionally substituted alkyl; and

$R^{12}$  represents a  $C_1$ - $C_6$  alkylene,  $C_2$ - $C_6$  alkenylene,  $C_2$ - $C_6$  alkynylene or  $C_1$ - $C_6$  alkyleneoxy;

$R^{13}$  represents optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl or optionally substituted heterocyclyl;

$R^{14}$  represents H or optionally substituted alkyl;

$R^{15}$  represents optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl or optionally substituted heterocyclyl; and

$R^{20}$  represents optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl or optionally substituted heterocyclyl, and where each t is independently 0 to 2.

4. (Currently amended) The pharmaceutical composition of claim 2 wherein n is 0 to 2; p is 0 to 2; X is O, or S(O), where r is 0 to 2;

$R^1$  is each independently selected from the group consisting of halo, cyano, thiocyanato, selenocyanato, trifluoromethoxy, azido, cyano, nitro, hydroxyl, formyl, mercapto, hydroxycarbonyl, optionally substituted alkyl, optionally substituted alkenyl,

optionally substituted alkynyl, alkoxy, aminoalkyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, and optionally substituted heterocyclyl;

R<sup>3</sup> is independently selected from the group consisting of hydrogen, halo, cyanato, thiocyanato, selenocyanato, trifluoromethoxy, azido, nitro, hydroxyl, formyl, mercapto, lower alkyl, optionally substituted lower alkenyl, optionally substituted lower alkynyl, lower alkoxy, and lower aminoalkyl;

R<sup>4</sup> selected from the group consisting of ~~hydrogen, halo,~~ cyanato, thiocyanato, selenocyanato, trifluoromethoxy, azido, ~~cyano,~~ nitro, hydroxyl, formyl, mercapto, ~~optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl,~~ optionally substituted cycloalkyl, optionally substituted cycloalkylalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, optionally substituted heteroaralkyl, optionally substituted heterocyclylalkyl, -R<sup>12</sup>-OR<sup>13</sup>, -R<sup>12</sup>-N(R<sup>14</sup>)R<sup>15</sup>, -R<sup>12</sup>-C(O)R<sup>13</sup>-R<sup>12</sup>-C(O)OR<sup>15</sup>, -R<sup>12</sup>-N(R<sup>14</sup>)C(O)R<sup>15</sup>, -R<sup>12</sup>-N(R<sup>14</sup>)C(O)OR<sup>15</sup>, -R<sup>12</sup>-S(O)<sub>n</sub>R<sup>15</sup> and -R<sup>12</sup>-S(O)<sub>n</sub>N(R<sup>14</sup>)R<sup>15</sup>;

each R<sup>5</sup> independently selected from the group consisting of halo, cyanato, thiocyanato, selenocyanato, trifluoromethoxy, azido, cyano, hydroxyl, formyl, mercapto, hydroxycarbonyl, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, optionally substituted cycloalkyl, optionally substituted heterocyclyl, -OR<sup>20</sup>, -S(O)<sub>n</sub>R<sup>20</sup>, -N(R<sup>7</sup>)R<sup>20</sup>, -N(R<sup>9</sup>)S(O)<sub>n</sub>R<sup>20</sup>, -C(O)R<sup>20</sup>, and -C(O)OR<sup>20</sup>;

R<sup>7</sup> represents H or optionally substituted alkyl;

each R<sup>9</sup> is independently H or optionally substituted alkyl;

R<sup>12</sup> represents a C<sub>1</sub>-C<sub>6</sub> alkylene, C<sub>2</sub>-C<sub>6</sub>  $\epsilon$ - $\epsilon$  alkenylene, C<sub>2</sub>-C<sub>6</sub>  $\epsilon$ - $\epsilon$  alkynylene or C<sub>1</sub>-C<sub>6</sub> alkyleneoxy;

R<sup>13</sup> represents optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl or optionally substituted heterocyclyl;

R<sup>14</sup> represents H or optionally substituted alkyl;

R<sup>15</sup> represents optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl or optionally substituted heterocyclyl;

R<sup>20</sup> is represents optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl or optionally substituted heterocyclyl, and where each t is independently 0 to 2.

5. (Currently amended) The pharmaceutical composition of claim 2 wherein

n is 0 to 2; p is 0 to 2; X is O, or S(O)<sub>r</sub> where r is 0 to 2;

R<sup>1</sup> is each independently selected from the group consisting of halo, cyanato, thiocyanato, selenocyanato, trifluoromethoxy, azido, cyano, nitro, hydroxyl, formyl, mercapto, hydroxycarbonyl, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, alkoxy, aminoalkyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, and optionally substituted heterocyclyl;

R<sup>3</sup> is independently selected from the group consisting of hydrogen, halo, cyanato, thiocyanato, selenocyanato, trifluoromethoxy, azido, nitro, hydroxyl, formyl, mercapto, alkyl, optionally substituted alkenyl, optionally substituted alkynyl, alkoxy, aminoalkyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, and optionally substituted heterocyclyl; or

R<sup>4</sup> selected from the group consisting of ~~hydrogen, halo,~~ cyanato, thiocyanato, selenocyanato, trifluoromethoxy, azido, cyano, nitro, hydroxyl, formyl, mercapto, ~~optionally substituted alkyl,~~ optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, optionally substituted heteroaralkyl, -R<sup>12</sup>-OR<sup>13</sup>, -R<sup>12</sup>-N(R<sup>14</sup>)R<sup>15</sup>, -R<sup>12</sup>-C(O)R<sup>13</sup>, -R<sup>12</sup>-C(O)OR<sup>15</sup>, -R<sup>12</sup>-N(R<sup>14</sup>)C(O)R<sup>15</sup>, -R<sup>12</sup>-S(O)<sub>r</sub>R<sup>15</sup>,

each R<sup>5</sup> independently selected from the group consisting of halo, cyanato, thiocyanato, selenocyanato, trifluoromethoxy, azido, cyano, nitro, hydroxyl, formyl, mercapto, hydroxycarbonyl, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, optionally substituted cycloalkyl, optionally substituted heterocyclyl, -OR<sup>20</sup>, -S(O)<sub>r</sub>R<sup>20</sup>, -N(R<sup>7</sup>)R<sup>20</sup>, -N(R<sup>9</sup>)S(O)<sub>r</sub>R<sup>20</sup>, -C(O)R<sup>20</sup>, and -C(O)OR<sup>20</sup>,

R<sup>7</sup> represents H or optionally substituted alkyl;

each R<sup>9</sup> is independently H or optionally substituted alkyl;



R<sup>12</sup> represents a C<sub>1</sub>-C<sub>6</sub> alkylene, C<sub>2</sub>-C<sub>6</sub>E<sub>4</sub>-E<sub>6</sub> alkenylene, C<sub>2</sub>-C<sub>6</sub> E<sub>4</sub>-C<sub>6</sub>alkynylene or C<sub>1</sub>-C<sub>6</sub> alkyleneoxy;

R<sup>13</sup> represents optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl or optionally substituted heterocyclyl;

R<sup>14</sup> represents H or optionally substituted alkyl;

R<sup>15</sup> represents optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl or optionally substituted heterocyclyl;

R<sup>20</sup> represents optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl or optionally substituted heterocyclyl, and where each t is independently 0 to 2.

6. (Currently amended) The pharmaceutical composition of claim 2 wherein

n is 0 to 2; p is 0 to 2; X is O, or S(O)<sub>r</sub> where r is 0 to 2;

R<sup>1</sup> is each independently selected from the group consisting of halo, cyanato, thiocyanato, selenocyanato, trifluoromethoxy, azido, cyano, nitro, hydroxyl, formyl, mercapto, hydroxycarbonyl, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, alkoxy, aminoalkyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, and optionally substituted heterocyclyl;

R<sup>3</sup> is independently selected from the group consisting of hydrogen, halo, cyanato, thiocyanato, selenocyanato, trifluoromethoxy, azido, nitro, hydroxyl, formyl, mercapto, alkyl, optionally substituted alkenyl, optionally substituted alkynyl, alkoxy, aminoalkyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, and optionally substituted heterocyclyl; or

R<sup>4</sup> selected from the group consisting of ~~hydrogen, halo,~~ cyanato, thiocyanato, selenocyanato, trifluoromethoxy, azido, cyano, nitro, hydroxyl, formyl, mercapto, ~~optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl,~~ optionally substituted cycloalkyl, optionally substituted cycloalkylalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, optionally substituted heteroaralkyl, optionally

substituted heterocyclylalkyl,  $-R^{12}-OR^{13}$ ,  $-R^{12}-N(R^{14})R^{15}$ ,  $-R^{12}-C(O)R^{13}$ ,  $-R^{12}-C(O)OR^{15}$ ,  $-R^{12}-N(R^{14})C(O)R^{15}$ ,  $-R^{12}-N(R^{14})C(O)OR^{15}$ ,  $-R^{12}-S(O)R^{15}$  and  $-R^{12}-S(O)N(R^{14})R^{15}$ ;

each  $R^5$  independently selected from the group consisting of halo, cyano, nitro, hydroxyl, formyl, hydroxycarbonyl, optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, optionally substituted cycloalkyl, optionally substituted heterocyclyl,  $-OR^{20}$ ,  $-S(O)R^{20}$ ,  $-N(R^7)R^{20}$ ,  $-C(O)R^{20}$ , and  $-C(O)OR^{20}$ ;

$R^7$  represents H or optionally substituted alkyl;

each  $R^9$  is independently H or optionally substituted alkyl;

$R^{12}$  represents a  $C_1-C_6$  alkylene,  $C_2-C_6$   $\text{C}_4-\text{C}_6$  alkenylene,  $C_2-C_6$   $\text{C}_4-\text{C}_6$  alkynylene, or  $C_1-C_6$  alkyleneoxy;

$R^{13}$  represents optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl or optionally substituted heterocyclyl;

$R^{14}$  represents H or optionally substituted alkyl;

$R^{15}$  represents optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl or optionally substituted heterocyclyl and

$R^{20}$  represents optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl or optionally substituted heterocyclyl, and where each  $t$  is independently 0 to 2.

7. (Canceled)

8. (Currently amended) The pharmaceutical composition of claim 2 wherein

$n$  is 0 or 1;  $p$  is 1 to 2;  $X$  is  $S(O)_r$ , where  $r$  is 0;

$R^1$  is each independently selected from the group consisting of halo, cyano, thiocyanato, selenocyanato, trifluoromethoxy, azido, cyano, nitro, hydroxyl, hydroxycarbonyl, optionally substituted alkyl, alkoxy, and aminoalkyl;

$R^3$  is independently selected from the group consisting of hydrogen, halo, cyano, thiocyanato, selenocyanato, trifluoromethoxy, azido, nitro, hydroxyl, formyl, mercapto, lower alkyl, optionally substituted lower alkenyl, optionally substituted lower alkynyl, lower alkoxy, lower aminoalkyl;

R<sup>4</sup> selected from the group consisting of ~~hydrogen, halo, cyano, thiocyanato, selenocyanato, trifluoromethoxy, azido, cyano, nitro, hydroxyl, formyl, mercapto, optionally substituted alkyl,~~ optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, optionally substituted heteroaralkyl, -R<sup>12</sup>-OR<sup>13</sup>, -R<sup>12</sup>-N(R<sup>14</sup>)R<sup>15</sup>, -R<sup>12</sup>-C(O)R<sup>13</sup>, -R<sup>12</sup>-C(O)OR<sup>15</sup>, -R<sup>12</sup>-N(R<sup>14</sup>)C(O)R<sup>15</sup>, -R<sup>12</sup>-S(O)<sub>2</sub>R<sup>15</sup>;

each R<sup>5</sup> independently selected from the group consisting of halo, cyano, nitro, hydroxyl, formyl, hydroxycarbonyl, optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, optionally substituted cycloalkyl, optionally substituted heterocyclyl, -OR<sup>20</sup>, -S(O)<sub>2</sub>R<sup>20</sup>, -N(R<sup>7</sup>)R<sup>20</sup>, -C(O)R<sup>20</sup>, and -C(O)OR<sup>20</sup>;

R<sup>7</sup> represents H or optionally substituted alkyl;

each R<sup>9</sup> is independently H or optionally substituted alkyl;

R<sup>12</sup> represents a C<sub>1</sub>-C<sub>6</sub> alkylene, C<sub>2</sub>-C<sub>6</sub>E<sub>4</sub>-E<sub>6</sub> alkenylene, C<sub>2</sub>-C<sub>6</sub>E<sub>4</sub>-E<sub>6</sub>alkynylene, or C<sub>1</sub>-C<sub>6</sub> alkyleneoxy;

R<sup>13</sup> represents optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl or optionally substituted heterocyclyl;

R<sup>14</sup> represents H or optionally substituted alkyl;

R<sup>15</sup> represents optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl or optionally substituted heterocyclyl;

R<sup>20</sup> represents optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl or optionally substituted heterocyclyl, and where each t is independently 0 to 2.

9. (Currently Amended) The pharmaceutical composition of claim 2 wherein

n is 0 or 1; p is 1 to 2; X is O;

R<sup>1</sup> is each independently selected from the group consisting of halo, cyano, thiocyanato, selenocyanato, trifluoromethoxy, azido, cyano, nitro, hydroxyl, hydroxycarbonyl, optionally substituted alkyl, alkoxy, and aminoalkyl;

R<sup>3</sup> is independently selected from the group consisting of hydrogen, halo, cyano, thiocyanato, selenocyanato, trifluoromethoxy, azido, nitro, hydroxyl, formyl,

mercapto, lower alkyl, optionally substituted lower alkenyl, optionally substituted lower alkynyl, alkoxy, and lower aminoalkyl;

$R^4$  selected from the group consisting of ~~hydrogen, halo,~~ cyanato, thiocyanato, selenocyanato, trifluoromethoxy, azido, cyano, nitro, hydroxyl, formyl, mercapto, ~~optionally substituted alkyl,~~ optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, optionally substituted heteroaralkyl,  $-R^{12}-OR^{13}$ ,  $-R^{12}-N(R^{14})R^{15}$ ,  $-R^{12}-C(O)R^{13}$ ,  $-R^{12}-C(O)OR^{15}$ ,  $-R^{12}-N(R^{14})C(O)R^{15}$ , and  $-R^{12}-S(O)_nR^{15}$ ;

each  $R^5$  independently selected from the group consisting of halo, cyano, nitro, hydroxyl, formyl, hydroxycarbonyl, optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, optionally substituted cycloalkyl, optionally substituted heterocyclyl,  $-OR^{20}$ ,  $-S(O)_nR^{20}$ ,  $-N(R^7)R^{20}$ ,  $-C(O)R^{20}$ , and  $-C(O)OR^{20}$ ;

$R^7$  represents H or optionally substituted alkyl;

each  $R^9$  is independently H or optionally substituted alkyl;

$R^{12}$  represents a  $C_1$ - $C_6$  alkylene,  $C_2$ - $C_6$ - $C_4$ - $C_6$  alkenylene,  $C_2$ - $C_6$ - $C_4$ - $C_6$  alkynylene, or  $C_1$ - $C_6$  alkyleneoxy;

$R^{13}$  represents optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl or optionally substituted heterocyclyl;

$R^{14}$  represents H or optionally substituted alkyl;

$R^{15}$  represents optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl or optionally substituted heterocyclyl and

$R^{20}$  represents optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl or optionally substituted heterocyclyl, and where each t is independently 0 to 2.

10. (Currently amended) The pharmaceutical composition of claim 2 wherein

n is 0 or 1; p is 1 to 2; X is  $S(O)_r$ , where r is 2;

$R^1$  is each independently selected from the group consisting of halo, cyanato, thiocyanato, selenocyanato, trifluoromethoxy, azido, cyano, nitro, hydroxyl, hydroxycarbonyl, optionally substituted alkyl, alkoxy, and aminoalkyl;

$R^3$  is independently selected from the group consisting of hydrogen, halo, cyanato, thiocyanato, selenocyanato, trifluoromethoxy, azido, nitro, hydroxyl, formyl, mercapto, lower alkyl, optionally substituted lower alkenyl, optionally substituted lower alkynyl, lower alkoxy, and lower aminoalkyl;

$R^4$  selected from the group consisting of ~~hydrogen, halo, cyanato, thiocyanato, selenocyanato, trifluoromethoxy, azido, cyano, nitro, hydroxyl, formyl, mercapto, optionally substituted alkyl,~~ optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, optionally substituted heteroaralkyl,  $-R^{12}-OR^{13}$ ,  $-R^{12}-N(R^{14})R^{15}$ ,  $-R^{12}-C(O)R^{13}$ ,  $-R^{12}-C(O)OR^{15}$ ,  $-R^{12}-C(O)-N(R^{14})-R^{15}$ ,  $-R^{12}-N(R^{14})C(O)R^{15}$ ,  $-R^{12}-S(O)_tR^{15}$ ;

each  $R^5$  independently selected from the group consisting of halo, cyano, nitro, hydroxyl, formyl, hydroxycarbonyl, optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, optionally substituted cycloalkyl, optionally substituted heterocyclyl,  $-OR^{20}$ ,  $-S(O)_tR^{20}$ ,  $-N(R^7)R^{20}$ ,  $-C(O)R^{20}$ , and  $-C(O)OR^{20}$ ;

$R^7$  represents H or optionally substituted alkyl;

each  $R^9$  is independently H or optionally substituted alkyl;

$R^{12}$  represents a  $C_1-C_6$  alkylene,  $C_2-C_6$   $\epsilon_4-\epsilon_6$  alkenylene,  $C_2-C_6$   $\epsilon_4-\epsilon_6$  alkynylene, or  $C_1-C_6$  alkyleneoxy;

$R^{13}$  represents optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl or optionally substituted heterocyclyl;

$R^{14}$  represents H or optionally substituted alkyl;

$R^{15}$  represents optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl or optionally substituted heterocyclyl;

$R^{20}$  represents optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl or optionally substituted heterocyclyl, and where each t is independently 0 to 2.

11. (Previously presented) The pharmaceutical composition of claim 1 wherein each t is independently 0 or 2.
12. (Canceled)

13. (Previously Presented) The pharmaceutical composition of claim 1 wherein the optional substituents are independently Q<sup>1</sup>, wherein Q<sup>1</sup> represents alkyl, alkoxy, aminoalkyl, haloalkyl, cycloalkyl, cycloalkylalkyl, heterocyclyl, heterocyclylalkyl, aryl, aralkyl, heteroaryl, heteroaralkyl, cyano, nitro, halo, hydroxyl, hydroxycarbonyl cyanato, thiocyanato, selenocyanato, trifluoromethoxy or azido.
14. (Currently Amended) A pharmaceutical composition of claim 1 comprising a pharmaceutically acceptable excipient and a compound selected from the group consisting of:

4-(4-nitrophenoxy)-2,6-diphenylpyrimidine;
2-(4-bromophenyl)-4-phenoxy-6-phenylpyrimidine;
2,4-diphenyl-6-(4-propylphenoxy)pyrimidine;
4-(2,6-diphenylpyrimidin-4-yloxy)benzaldehyde;
4-(2,6-diphenylpyrimidin-4-yloxy)benzonitrile;
4-phenoxy-2,6-diphenylpyrimidine;
4-(2-(4-bromophenyl)-6-phenylpyrimidin-4-yloxy)benzonitrile;
2-(4-bromophenyl)-4-methyl-6-phenoxy-pyrimidine;
4-(biphenyl-4-yloxy)-2-(4-bromophenyl)-6-phenylpyrimidine;
4-(4-butylphenoxy)-2,6-diphenylpyrimidine;
4-(biphenyl-4-yloxy)-2-(4-bromophenyl)-6-methylpyrimidine;
1-(4-(2-(4-bromophenyl)-6-methylpyrimidin-4-yloxy)phenyl)ethanone;
2-(4-(biphenyl-4-yloxy)-6-methylpyrimidin-2-yl)phenol;
2-(4-bromophenyl)-4-methyl-6-(4-nitrophenoxy)pyrimidine;
2-(4-bromophenyl)-4-methyl-6-(4-propylphenoxy)pyrimidine;
4-((4-chlorophenylthio)methyl)-2-phenyl-6-(phenylthio)pyrimidine;
4-(4-chlorophenylthio)-6-((4-chlorophenylthio)methyl)-2-phenylpyrimidine;
2-phenyl-4-(phenylsulfonylmethyl)-6-(phenylthio)pyrimidine;
4-phenoxy-2-phenyl-6-(phenylsulfonylmethyl)pyrimidine;
4-(4-chlorophenylthio)-2-phenyl-6-(phenylsulfonylmethyl)pyrimidine;
4-((4-chlorophenylsulfinyl)methyl)-6-phenoxy-2-phenylpyrimidine;
4-((4-chlorophenylsulfinyl)methyl)-6-(4-chlorophenylthio)-2-phenylpyrimidine;
2-phenyl-4-(phenylsulfinylmethyl)-6-(phenylthio)pyrimidine;
4-phenoxy-2-phenyl-6-(phenylsulfonylmethyl)pyrimidine;

4-phenoxy-2-phenyl-6-(phenylsulfinylmethyl)pyrimidine;
4-(methylthiomethyl)-2-phenyl-6-(phenylthio)pyrimidine;
4-(methylthiomethyl)-2-phenyl-6-(3-(trifluoromethyl)phenylthio)pyrimidine;
4-(methylthiomethyl)-6-phenoxy-2-phenylpyrimidine;
4-(4-chlorophenylthio)-6-(methylsulfonylmethyl)-2-phenylpyrimidine;
methyl 2-(6-(methylsulfonylmethyl)-2-phenylpyrimidin-4-ylthio)benzoate;
4-(2,3-dichlorophenylthio)-6-(methoxymethyl)-2-phenylpyrimidine;
4-(2,6-dichlorophenylthio)-6-(methoxymethyl)-2-phenylpyrimidine;
4-(2,4-dichlorophenylthio)-6-(methoxymethyl)-2-phenylpyrimidine;
4-(4-bromophenylthio)-6-(methoxymethyl)-2-phenylpyrimidine;
4-(methoxymethyl)-6-(4-methoxyphenylthio)-2-phenylpyrimidine;
4-(4-bromophenylthio)-2-phenyl-6-(phenylthiomethyl)pyrimidine;
4-(4-chlorophenylthio)-6-(methoxymethyl)-2-phenylpyrimidine;
4-((4-chlorophenylthio)methyl)-2-phenyl-6-(p-tolylthio)pyrimidine;
4-((4-chlorophenylthio)methyl)-6-(2,6-dichlorophenylthio)-2-phenylpyrimidine;
4-(3-chlorophenylthio)-6-((4-chlorophenylthio)methyl)-2-phenylpyrimidine;
4-((4-chlorophenylthio)methyl)-6-(2,4-dichlorophenylthio)-2-phenylpyrimidine;
4-((4-chlorophenylthio)methyl)-6-(4-methoxyphenylthio)-2-phenylpyrimidine;
4-(4-chlorophenylthio)-6-((4-chlorophenylthio)methyl)-2-phenylpyrimidine;
4-((4-chlorophenylthio)methyl)-6-(4-fluorophenylthio)-2-phenylpyrimidine;
4-(4-bromophenylthio)-6-(methylsulfonylmethyl)-2-phenylpyrimidine;
methyl 4-(2,6-diphenylpyrimidin-4-yloxy)benzoate;
methyl 4-(2-(4-bromophenyl)-6-methylpyrimidin-4-yloxy)benzoate;
4-(2-(2-hydroxyphenyl)-6-methylpyrimidin-4-yloxy)benzoic acid; <u>and</u>
4-(biphenyl-4-yloxy)-6-methyl-2-phenylpyrimidine[;].

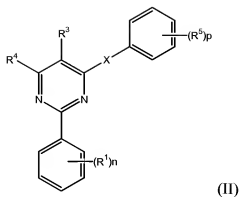
15-30. (Canceled)

31. (Previously Presented) A pharmaceutical composition comprising the composition of claim 1 and an additional active compound.
32. (Previously Presented) The pharmaceutical composition of claim 31, wherein said additional active compound is selected from levodopa (L-dihydroxyphenylalanine), L-

aromatic amino acid decarboxylase (AADC) inhibitors and catechol O-methyl transferase (COMT) inhibitors.

33. (Original) The pharmaceutical composition of claim 31, wherein said additional active compound is selected from an anti-inflammatory compound.
34. (Previously Presented) The pharmaceutical composition of claim 33, wherein said anti-inflammatory compound is selected from a matrix metalloproteinase inhibitor, an inhibitor of pro-inflammatory cytokines, non-steroidal anti-inflammatory drugs (NSAIDs), prostaglandin synthase inhibitors, COX-1 or COX-2 inhibitors, or corticosteroids, .
35. (Previously Presented) The pharmaceutical composition of claim 31, wherein said additional active compound is selected from an antihyperlipidemic agent; a plasma HDL-raising agent; an antihypercholesterolemic agent, such as a cholesterol biosynthesis inhibitor, e.g., an hydroxymethylglutaryl (HMG) CoA reductase inhibitor, an HMG-CoA synthase inhibitor, a squalene epoxidase inhibitor, or a squalene synthetase inhibitor; an acyl-coenzyme A cholesterol acyltransferase (ACAT) inhibitor, such as melinamide; probucol; nicotinic acid and the salts thereof and niacinamide; a cholesterol absorption inhibitor; a bile acid sequestrant anion exchange resin; an LDL (low density lipoprotein) receptor inducer; fibrates; vitamin B<sub>6</sub> (pyridoxine) and the pharmaceutically acceptable salts thereof; vitamin B<sub>12</sub> (cyanocobalamin); vitamin B<sub>3</sub>; anti-oxidant vitamins; a beta-blocker; LXR  $\alpha$  or  $\beta$  agonists, antagonists, or partial agonists, FXR agonists, antagonists, or partial agonists, an angiotensin II antagonist; an angiotensin converting enzyme inhibitor; and a platelet aggregation inhibitor and aspirin.
36. (Original) The pharmaceutical composition of claim 31, wherein said additional active compound comprises parathyroid hormone (PTH) or physiologically active fragment thereof.
37. (Currently Amended) A pharmaceutical composition comprising the compound of formula (II)





wherein

n is 0 to 2; p is 1; X is N(R<sup>7</sup>);

R<sup>1</sup> is hydroxyl;

R<sup>3</sup> is selected from the group consisting of hydrogen or (C<sub>3</sub>)alkenyl;

R<sup>4</sup> is (C<sub>1</sub>)alkyl;

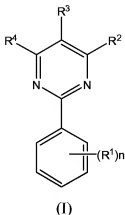
R<sup>5</sup> is hydroxycarbonyl;

R<sup>7</sup> is H; and

a pharmaceutically acceptable excipient.

38. (Previously Presented) The pharmaceutical composition of claim 37 wherein wherein n is 0.
39. (Currently Amended) A pharmaceutical composition of claim 37 comprising a compound selected from the group consisting of:
  - 4-(6-methyl-2-phenylpyrimidin-4-ylamino)benzoic acid;
  - 4-(5-allyl-6-methyl-2-phenylpyrimidin-4-ylamino)benzoic acid; and
  - 3-(6-methyl-2-phenylpyrimidin-4-ylamino)benzoic acid; and

40. (New) A pharmaceutical composition comprising a compound of formula (I)



or a pharmaceutical acceptable salt thereof, wherein

n is 0 to 5;

R<sup>1</sup> is each independently selected from the group consisting of halo, cyanato, thiocyanato, selenocyanato, trifluoromethoxy, azido, cyano, nitro, hydroxyl, formyl, mercapto, hydroxycarbonyl, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, alkoxy, aminoalkyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, and optionally substituted heterocyclyl;

R<sup>2</sup> is selected from the group consisting of optionally substituted cycloalkyl, optionally substituted aralkyl, -OR<sup>6</sup>, -S(O)<sub>n</sub>R<sup>6</sup>, -N(R<sup>9</sup>)S(O)<sub>n</sub>R<sup>10</sup>, -C(O)R<sup>6</sup>, -C(O)OR<sup>6</sup>, and -C(O)N(R<sup>7</sup>)R<sup>8</sup>;

R<sup>3</sup> is independently selected from the group consisting of hydrogen, halo, cyanato, thiocyanato, selenocyanato, trifluoromethoxy, azido, nitro, hydroxyl, formyl, mercapto, alkyl, optionally substituted alkenyl, optionally substituted alkynyl, alkoxy, aminoalkyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, and optionally substituted heterocyclyl; or

R<sup>4</sup> selected from the group consisting of cyanato, thiocyanato, selenocyanato, trifluoromethoxy, azido, cyano, nitro, hydroxyl, formyl, mercapto, optionally substituted cycloalkyl, optionally substituted cycloalkylalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, optionally substituted heteroaralkyl, optionally substituted heterocyclylalkyl, -R<sup>12</sup>-OR<sup>13</sup>,

$-R^{12}-N(R^{14})R^{15}$ ,  $-R^{12}-C(O)R^{13}$ ,  $-R^{12}-C(O)OR^{15}$ ,  $-R^{12}-N(R^{14})C(O)R^{15}$ ,  
 $-R^{12}-N(R^{14})C(O)OR^{15}$ ,  $-R^{12}-S(O)R^{15}$  and  $-R^{12}-S(O)N(R^{14})R^{15}$ ;

$R^6$  represents substituted alkyl, optionally substituted aryl, optionally substituted aralkyl or optionally substituted heterocyclyl;

$R^7$  represents H or optionally substituted alkyl;

$R^8$  represents optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl or optionally substituted heterocyclyl;

$R^9$  represents H or optionally substituted alkyl;

$R^{10}$  represents optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl or optionally substituted heterocyclyl;

$R^{12}$  represents a  $C_1$ - $C_6$  alkylene,  $C_2$ - $C_6$  alkenylene,  $C_2$ - $C_6$  alkynylene or  $C_1$ - $C_6$  alkyleneoxy;

$R^{13}$  represents optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl or optionally substituted heterocyclyl;

$R^{14}$  represents H or optionally substituted alkyl;

$R^{15}$  represents optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl or optionally substituted heterocyclyl, and where each  $t$  is independently 0 to 2,

wherein the optional substituents are independently  $Q^1$ , where  $Q^1$  represents alkyl, haloalkyl, cycloalkyl, cycloalkylalkyl, heterocyclylalkyl, aryl, aralkyl, heteroaryl, heteroaralkyl, cyano, halo, hydroxyl, hydroxycarbonyl, cyanato, thiocyanato, selenocyanato, trifluoromethoxy, azido,  $-R^{30}-OR^{31}$ ,  $-R^{30}-SR^{16}$ ,  $-R^{30}-N(R^{32})(R^{33})$ ,  $-R^{30}-C(J)R^{34}$ ,  $-R^{30}-C(J)OR^{31}$ ,  $-R^{30}-C(J)N(R^{31})N(R^{32})(R^{33})$ ,  $-R^{30}-N(R^{31})C(J)R^{34}$ ,  $-R^{30}-N(R^{31})C(J)OR^{31}$ ,  $-R^{30}-N(R^{31})C(J)N(R^{32})(R^{33})$ ,  $-R^{30}-OC(J)R^{34}$ ,  $-R^{30}-OC(J)OR^{31}$ ,  $-R^{30}-OC(J)N(R^{32})(R^{33})$ ,  $-Si(R^{35})_3$ ,  $-N(R^{31})S(O)R^{36}$  or  $-R^{30}-S(O)R^{36}$ ;

where each  $R^{30}$  is independently a direct bond or a straight or branched alkylene chain;

$R^{31}$  and  $R^{34}$  are each independently hydrogen, alkyl, alkenyl, alkynyl, haloalkyl, cycloalkyl, cycloalkylalkyl, heterocyclylalkyl, aryl, aralkyl, heteroaryl or heteroaralkyl;

$R^{32}$  and  $R^{33}$  are each independently hydrogen, alkyl, alkenyl, alkynyl, haloalkyl, cycloalkyl, cycloalkylalkyl, heterocyclyl, aryl, aralkyl, heteroaryl or heteroaralkyl;

or R<sup>32</sup> and R<sup>33</sup> together with the nitrogen atom to which they are attached, from a heterocyclylalkenyl, or heteroaryl;

R<sup>35</sup> R<sup>36</sup> and R<sup>16</sup> are each independently alkyl, alkenyl, alkynyl, haloalkyl, cycloalkyl, cycloalkylalkyl, heterocyclyl, heterocyclylalkyl, aryl, aralkyl, heteroaryl or heteroaralkyl;

each J is independently O or S; and each y is independently 0 to 2;

and a pharmaceutically acceptable excipient.